

# **ELEVENTH INTERNATIONAL CONFERENCE ON COMPOSITE MATERIALS**

**Gold Coast, Queensland Australia  
14th - 18th July 1997**

## **PROCEEDINGS**

**Editor**

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**Australian Composite Structures Society**

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## PREFACE

The International Conference on Composite Materials (ICCM) is the pre-eminent world conference in the field. The series was founded in 1975 by an international committee, which has progressively expanded to include representatives from most of the world's developed countries. The general theme of this conference, the eleventh in the series, is "Advanced Composites in the New World". The rapidly expanding economies of the Asia-Pacific offer enormous potential for the wide spread development and usage of advanced materials technology. Many countries in the region have impressive industrial activity which is underpinned by a range of sophisticated manufacturing technologies. Although there is still reliance on traditional sources for new materials and processes, local research and development capability is now providing significant output. In fact, growth in composites technology is now recognised as a key factor for economic development in a number of countries. Many engineers and scientists who have not previously attended an ICCM, have contributed papers for the first time, thus bringing new ideas, perspectives and business opportunities to the international composites community. Representatives of over forty countries are involved with ICCM-11 either as authors or in some other way. It is with this background that the conference theme was developed.

In keeping with the successful traditions established at previous ICCM's, the scope for conference papers was kept broad, with the one restriction that only work of the highest quality would be accepted. In order to achieve this objective, a Technical Review Committee was established which worked with technical reviewers from all over the world. Each of the 830 abstracts submitted was reviewed by two reviewers to determine its appropriateness for presentation in plenary, specialist or poster sessions. Selection criteria included relevance to the conference, accuracy and originality of ideas, significance of results and quality of presentation. Following this initial selection process, papers were invited which were then submitted to two or more reviewers for comment and grading. Many papers were then sent back to authors for modification. At the conclusion of this process, a total of 536 papers was accepted for presentation and inclusion in the ICCM-11 Proceedings. Except for the first 10 papers which are the plenaries, no distinction is made between the 422 specialist and 104 poster papers which are ordered in 29 topic areas.

Several new ideas have been introduced for ICCM-11. Perhaps the most important is that for the first time, the proceedings are available in both CD-ROM and book formats. The CD-ROM is fully searchable and includes colour figures and photographs. The proceedings are complemented by a book of extended abstracts. Although the primary purpose of the extended abstracts is to provide conference attendees with a two-page overview of each paper for reference during sessions, they will also serve as an enduring reference for both professionals and students. It is anticipated that the book of extended abstracts will be particularly useful for those who choose to rely only on the CD-ROM version of the proceedings.

As ICCM-11 Chairman and Editor of the proceedings, I wish to acknowledge the outstanding contributions of the many people involved with the preparations for this conference. The 1280 paper authors, 317 technical reviewers and the members of the ICCM-11 Technical Review and Technical Sessions Committees have all worked extremely hard to present an excellent collection of papers, which represent the current status of advanced composites science and technology. The ICCM President, Executive Secretary, ICCM-11 Vice-Chairmen and members of the Local Organising Committee have provided much valuable advice and assistance in planning all aspects of the conference. The support of the Co-Sponsoring Societies, together with the ICCM-11 Sponsors and Exhibitors, is also gratefully acknowledged. Finally, I wish to record my appreciation of the efforts of both the full- and part-time Conference Office staff who were most ably led by our Conference Administrator.=

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Murray L. Scott

*Melbourne*  
*July 1997*

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